

### **ABSTRACT OF THE DISCLOSURE**

A variable speed bus has its frequency adjusted based upon bandwidth requirements of active units coupled to a variable speed bus. As units coupled to the bus are stopped, bandwidth requirements are lowered and the bus frequency is reduced in response to the lowered bandwidth requirements. An arbiter selects an appropriate arbitration configuration based on which units are active and which are stopped. The arbitration configuration is adjusted to ensure that the bandwidth requirements of the active units are sustained despite the reduced clock frequency.